

Listing of Claims

1. (Original) Oligonucleotide useful for the detection of *Mycobacterium avium* subspecies *paratuberculosis* (*MAP*) selected from the group consisting of oligonucleotides of the following sequences:

P1N GCA TGG CCC ACA GGA CGR RGA G
P2N CTA CAA CAA GAG CCG TGC CG
P3N GGG TGT GGC GTT TTC CTT CG
P4N TCC TGG GCG CTG AGT TCC TC.

2. (Original) Set of oligonucleotides comprising alone or in combination one or more of the oligonucleotides according to claim 1, particularly the combinations of oligonucleotides P1N/P2N, P3N/P4N, P1N/P3N, P1N/P4N, P2N/P3N, P2N/P4N, P1N/P2N/P3N, P1N/P2N/P4N, P1N/P3N/P4N, P2N/P3N/P4N and/or P1N/P2N/P3N/P4N.

3. (Original) Method for the detection of MA and/or MAP in a sample comprising the steps;

- (a) isolating DNA from the sample;
- (b) performing a one-tube PCR using the isolated DNA from at least one of the oligonucleotides according to Claim 1;
- (c) screening for positive PCR amplification results;
- (d) identification of MAP containing samples,

Which method is characterized in that at least one of the oligonucleotides according to Claim 1 are used in the PCR.

4. (Currently amended) ~~Method—The method according to claim 3 using one or more sets of oligonucleotides according to claim 2 comprising selected from P1N/P2N, P3N/P4N, P1N/P3N, P1N/P4N, P2N/P3N, P2N/P4N, P1N/P2N/P3N, P1N/P2N/P4N, P1N/P3N/P4N, P2N/P3N/P4N and/or P1N/P2N/P3N/P4N. particularly a set comprising all four oligonucleotides.~~

5. (Currently amended) Use of the method according to ~~claims~~ claim 3 or 4 for the detection of MAP in a sample from a living animal, in a product derived from a living creature, including human beings or animals, particularly from cattle, poultry or chicken, and/or in a sample derived from non-living origin, particularly from dust or plants.

6. (Currently amended) Use of the method according to ~~claims~~ claim 3 or 4 for the diagnosis of MAP infection in a living creature, including human, particularly in cattle, poultry or chicken.

7. (Currently amended) Kit for the detection of MAP in a specimen, which comprises:

- (a) means of isolating DNA from the sample;
- (b) oligonucleotides according to claim 1 and/or set of oligonucleotides according to claim 2 selected from P1N/P2N, P3N/P4N, P1N/P3N, P1N/P4N, P2N/P3N, P2N/P4N, P1N/P2N/P3N, P1N/P2N/P4N, P1N/P3N/P4N, P2N/P3N/P4N and/or P1N/P2N/P3N/P4N.
- (c) means of screening for positive PCR amplification results;
- (d) means of identification of MAP containing samples.

8. (Currently Amended) Kit comprising one or more oligonucleotides according to claim 1 and/or one or more sets of oligonucleotides according to claim 2 selected from P1N/P2N, P3N/P4N, P1N/P3N, P1N/P4N, P2N/P3N, P2N/P4N, P1N/P2N/P3N, P1N/P2N/P4N, P1N/P3N/P4N, P2N/P3N/P4N and/or P1N/P2N/P3N/P4N and a container.

9. (Original) Kit comprising all four oligonucleotides according to claim 1 and a container.

10. (Currently amended) Use of the Kit according to claim 7, 8 or 9 for the method according to claim 3 and/or 4 comprising the steps;

- (a) isolating DNA from the sample;
- (b) performing a one-tube PCR using the isolated DNA from at least one of the oligonucleotides selected from the group consisting of oligonucleotides of the following sequences:

P1N GCA TGG CCC ACA GGA CGR RGA G

P2N CTA CAA CAA GAG CCG TGC CG

P3N GGG TGT GGC GTT TTC CTT CG

P4N TCC TGG GCG CTG AGT TCC TC;

- (c) screening for positive PCR amplification results;

- (d) identification of MAP containing samples.

11. (New) Use of the kit according to claim 8 for the method comprising the steps;

- (a) isolating DNA from the sample;
- (b) performing a one-tube PCR using the isolated DNA from at least one of the oligonucleotides selected from the group consisting of oligonucleotides of the following sequences:

P1N GCA TGG CCC ACA GGA CGR RGA G

- P2N CTA CAA CAA GAG CCG TGC CG
P3N GGG TGT GGC GTT TTC CTT CG
P4N TCC TGG GCG CTG AGT TCC TC;
(c) screening for positive PCR amplification results;
(d) identification of MAP containing samples.
12. (New) Use of the kit according to claim 9 for the method comprising the steps;
(a) isolating DNA from the sample;
(b) performing a one-tube PCR using the isolated DNA from at least one of the oligonucleotides selected from the group consisting of oligonucleotides of the following sequences:
- P1N GCA TGG CCC ACA GGA CGR RGA G
P2N CTA CAA CAA GAG CCG TGC CG
P3N GGG TGT GGC GTT TTC CTT CG
P4N TCC TGG GCG CTG AGT TCC TC;
(c) screening for positive PCR amplification results;
(d) identification of MAP containing samples.
13. The method according to claim 3 using a set comprising all four said oligonucleotides.